

54457 Deren

# Work Order ID 53516



Page 1

November 6, 2009 4:10:51 PM

Item ID: D412-742-043

Accept



Setup Start



Revision ID: H

Stop



Item Name: Replacement Float Skidtube

Start Date: 06/11/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 17/11/2009 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: BD

Date: 09-11-9

Tooling:

Date:

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3391

Rev H

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

If D412-742-043 is a W/O on it's own,  
Photocopy bluefile and create labels per PPP D412-742-043 CHG004

N/A AD

# Work Order ID 53516

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Page 2

Item ID: D412-742-043

Accept



Setup Start



Revision ID: H

Stop



Item Name: Replacement Float Skidtube

Start Date: 06/11/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 17/11/2009 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

110

0.00



HandFinishing

HandFinish

Memo

0.00

Hand Finishing

\*\*\*\*\*Do not apply LPS, see QC for more info\*\*\*\*\*

✓ 1-Spray inside tube of D3391-021/-023/-025 with LPS-3 as per Dwg D3391

A/R LPS-3 ☐ Nil

2-Install tubes together and seal them all the way around using Sikaflex 241/291. Ensure tube ends line-up with saddle holes for proper alignment. using 7/16" "T" Pins.

A/R ☐ Sikaflex-241/-291 ☐ M112345

Expiry date: ☐ 10/08

3-Install wearplates as per Dwg D3391. Ensure that plastic washers are against wearplate, then topped with the SS washer. Coat bolts with LPS "procyon". Seal all bolts with sikaflex except ones with inserts on inside of tube, hand tighten only bolts with no sikaflex.

✓ A/R ☐ LPS Procyon ☐ M104251

A/R ☐ Sikaflex-241/-291 ☐ M112345

Expiry date: ☐ 10/00

✓ 4-Remove "T" pins once sikaflex is dry.

✓ 5-Coat all exposed hardware with LPS Procyon. Remove any excess off with MEK degreaser.

⇒ M0912101

(X1)

Ø

**Work Order ID 53516**

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Item ID: D412-742-043

Accept



Setup Start



Revision ID: H

Stop



Item Name: Replacement Float Skidtube

Start Date: 06/11/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 17/11/2009 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

120

QC5- Inspect part completeness to step on W/O

0.00

=&gt; S 07/12/02



QC

Memo

0.00

Quality Control



f

130

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D412-742-043

Location: \_\_\_\_\_

PPP Rev: \_\_\_\_\_

PPP 50781 9/12/05

140

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

09/12/10 JA

MF 09-12-09

# Picklist Print

November 6, 2009 4:10:55 PM

Page 1

8

Work Order ID: 53516

Parent Item: D412-742-043RevH

Parent Item Name: Replacement Float Skidtube


Comments:

Start Date: 06/11/2009

Required Date: 17/11/2009

Start Qty: 1.00


Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN3C4A  BOLT		Purchased	No			110	Each	944.0000	24.0000			

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	944	
112314	13	
112720	12	
112724	3	
112794	316	
112829	500	
112991	100	

11113121

x24 28 09/12/01

AN3C6A  BOLT		Purchased	No			110	Each	904.0000	12.0000			
---	--	-----------	----	--	--	-----	------	----------	---------	--	--	--

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	904	
111982	904	

x12 28 09/12/01

# Picklist Print

November 6, 2009 4:10:55 PM

Work Order ID: 53516

Parent Item: D412-742-043RevH

Parent Item Name: Replacement Float Skidtube

Comments:

Start Date: 06/11/2009

Required Date: 17/11/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

AN3C7A Purchased No 110 Each 273.0000 8.0000



BOLT

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse	1113149	
ST	273	
105906	21	
107376	252	

x8 11 09/12/01

AN960C10L Purchased No 110 Each 3,906.000 44.0000



washer

Warehouse	Loc Qty	Loc Code
Location		
OFFSHORE		
FG	100	
103585	100	
Main Warehouse		
ST	3806	
112116	628	
112612	2178	
112933	1000	

x44 11 09/12/01

D3391-021RevH Manufactured No 110 Each 0.0000 1.0000



Fwd Tube Assembly

11 09/12/01

(X1)

B52359

*Handwritten notes:*  
 A - already pulled  
 on 03391-021  
 B52793  
 MF  
 09-12-09

# Picklist Print

Page 3

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Work Order ID: 53516

Parent Item: D412-742-043RevH

Parent Item Name: Replacement Float Skidtube


Comments:

Start Date: 06/11/2009

Required Date: 17/11/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3391-023RevH  Mid Tube Assembly		Manufactured	No			110	Each	1.0000	1.0000			

25 09/12/01

1352793

Warehouse Loc Qty Loc Code  
Location

Main Warehouse

ST

1

40522

1

D3391-025RevH

Manufactured

No

110

Each

2.0000

1.0000



Aft Tube Assembly

Warehouse Loc Qty Loc Code  
Location

Main Warehouse

ST

2

39129

1

48122

1

1352795

(X)

25 09/12/01

# Picklist Print

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Page 4

Work Order ID: 53516

Parent Item: D412-742-043RevH

Parent Item Name: Replacement Float Skidtube

Comments:

Start Date: 06/11/2009

Required Date: 17/11/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3564-1RevD		Manufactured	No			110	Each	27.0000	1.0000			



Wearshoe

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
OFFSHORE		
FG	2	
33798	2	
Main Warehouse		
ST	25	
47531	1	
48163	2	
50270	1	
51676	21	

x1 M 09/12/01

# Picklist Print

November 6, 2009 4:10:55 PM

Work Order ID: 53516



Parent Item: D412-742-043RevH



Parent Item Name: Replacement Float Skidtube

Start Date: 06/11/2009

Required Date: 17/11/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3564-3RevD		Manufactured	No			110	Each	17.0000	1.0000			



Wearshoe



<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
OFFSHORE		
FG	2	
33764	2	
Main Warehouse		
FP	11	
50113	11	
Main Warehouse		
ST	4	
46445	1	
50364	3	

(X1) 141 02/12/01



# Picklist Print

November 6, 2009 4:10:55 PM

Work Order ID: 53516

Parent Item: D412-742-043RevH

Parent Item Name: Replacement Float Skidtube

Comments:

Start Date: 06/11/2009

Required Date: 17/11/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3564-5RevD		Manufactured	No			110	Each	34.0000	1.0000			



Wearshoe



<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
OFFSHORE		
FG	2	
34806	2	
Main Warehouse		
FP19	16	
51655	8	
51925	8	
Main Warehouse		
ST	16	
45824	1	
47433	1	
52595	14	

xl M 09/12/09

# Picklist Print

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Work Order ID: 53516

Parent Item: D412-742-043RevH

Parent Item Name: Replacement Float Skidtube

Comments:



Start Date: 06/11/2009

Required Date: 17/11/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3566-1RevC		Manufactured	No			110	Each	20.0000	2.0000			
Gasket												

## Warehouse

## Loc Qty

## Loc Code

### Location

1353790

Main Warehouse

FP

15

52512

15

Main Warehouse

ST

5

46349

1

51218

1

51259

3

(x2)

11/09/12/01

# Picklist Print

Page 8

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Work Order ID: 53516

Parent Item: D412-742-043RevH

Parent Item Name: Replacement Float Skidtube



Comments:

Start Date: 06/11/2009

Required Date: 17/11/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3566-5RevC  Gasket		Manufactured	No			110	Each	34.0000	1.0000 			

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

FP

10

51929

10

Main Warehouse

FP19

20

52909

20

Main Warehouse

ST

4

36113

1

46186

1

47318

1

51260

1

(xU) M 04/12/09

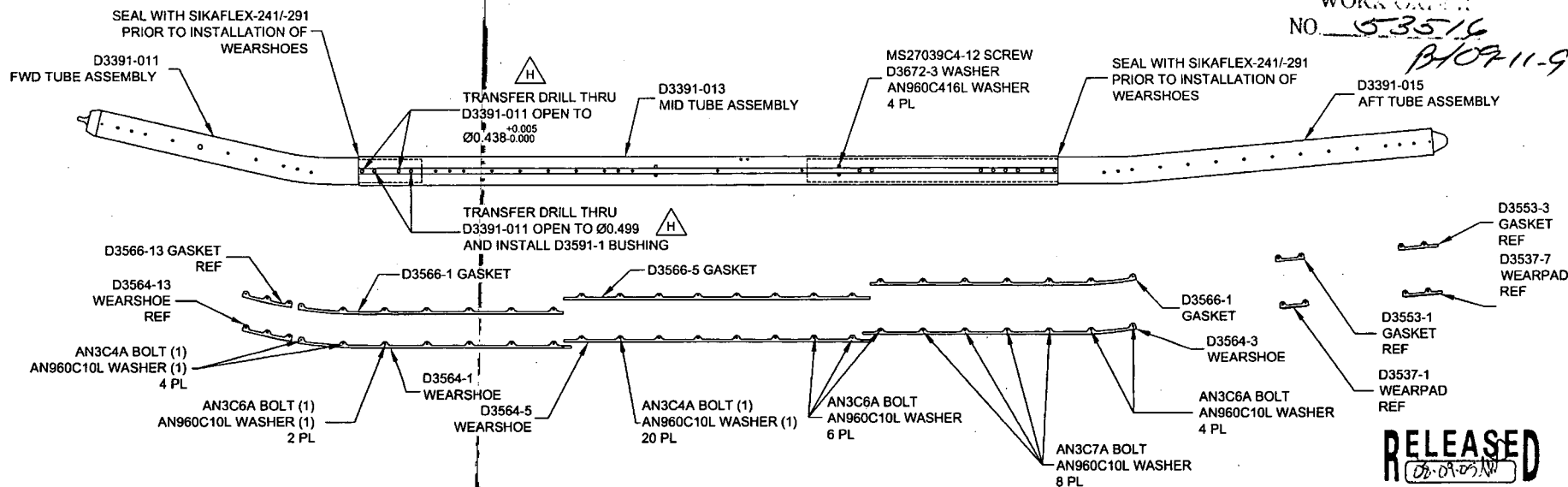
November 6, 2009 4:10:55 PM

Shop Packet Print

Page 8

SHOP COPY  
RETURN TO

UNCONTROLLED COPY  
SUBJECT TO APPROVAL  
WITHOUT EFFECT  
WORK ORDER NO. 53516  
B10711-9



RELEASED  
02-08-05

# D3391-041 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

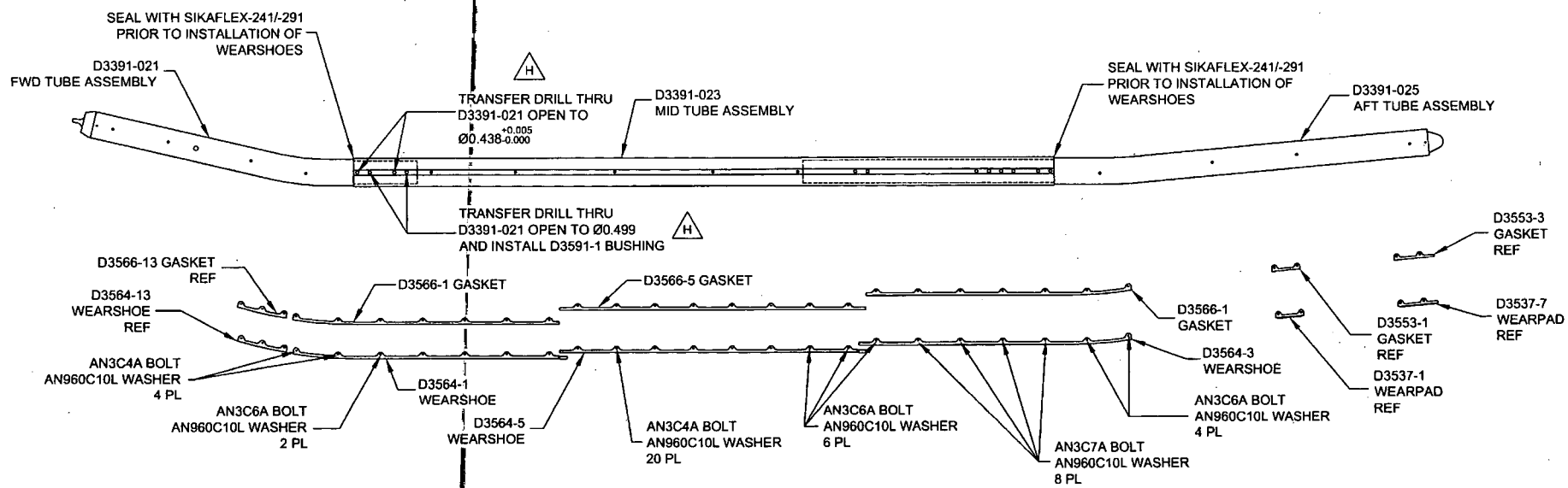
QTY	PART NUMBER	DESCRIPTION
1	D3391-041	Float Skidtube Assembly
1	D3391-011	FWD TUBE ASSEMBLY
1	D3391-013	MID TUBE ASSEMBLY
1	D3391-015	AFT TUBE ASSEMBLY
1	D3564-1	WEARSHOE
1	D3564-3	WEARSHOE
1	D3564-5	WEARSHOE
2	D3566-1	GASKET
1	D3566-5	GASKET
2	D3561-1	BUSHING
4	D3672-3	WASHER
24	AN3C4A	BOLT
12	AN3C6A	BOLT
9	AN3C7A	BOLT
44	AN960C10L	WASHER
4	MS27039C4-12	SCREW
4	AN960C416L	WASHER

## GENERAL NOTES

- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.

H	DRAWING UPDATED TO CURRENT STANDARDS. SHT 1 PL ADDED D3591-1 BUSHING. ZN C6 Ø0.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. SHT 2 PL ADDED D3591-1 BUSHING. ZN C6 Ø0.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. (FOR FURTHER INFO SEE DSI 9364 & NCR 08-074)	AJS	08.08.20
G	REPLACE NAS INSERTS W/ AELS INSERTS SWITCH TO D3670-XXXX SPACERS FOR INSTALLING FLOAT BAGS, DWG REORGANIZED FOR CLARITY	DC	07.07.31
F	ADD SS WEARSHOE, GASKET REMOVE FWD SADDLE HOLE -011/-021	PH	07.01.18
E	CHANGE TOLERANCE, EASE MANUFACTURE	PH	06.04.25
D	UPDATE TOLERANCE, CHANGE HOLE SIZE	PH	06.01.23
C	LENGTHEN AFT EXTENSION	PH	05.09.27
B	DRAWING UPDATES	PH	05.06.10
A	NEW ISSUE	PH	05.02.07
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 1 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
DATE	08.08.20	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC	

W/O 53516



**D3391-043 ASSEMBLY**




**D3391-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST**

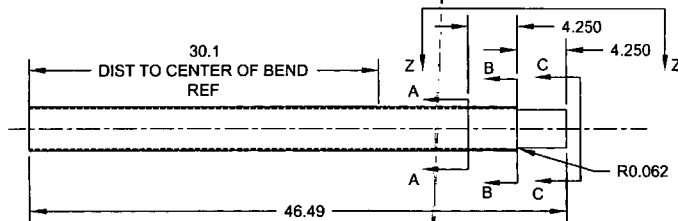
QTY	PART NUMBER	DESCRIPTION
1	D3391-043	FLOAT SKIDTUBE ASSEMBLY
1	D3391-021	FWD TUBE ASSEMBLY
1	D3391-023	MID TUBE ASSEMBLY
1	D3391-025	AFT TUBE ASSEMBLY
1	D3564-1	WEARSHOE
1	D3564-3	WEARSHOE
1	D3564-5	WEARSHOE
2	D3566-1	GASKET
1	D3566-5	GASKET
2	D3591-1	BUSHING
24	AN3C4A	BOLT
12	AN3C6A	BOLT
8	AN3C7A	BOLT
44	AN960C10L	WASHER

**GENERAL NOTES**

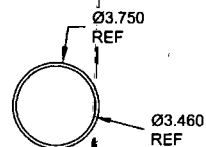
- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.

**RELEASED**  
08-09-25/10

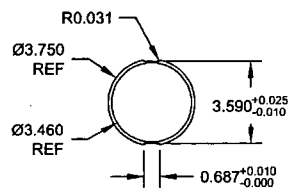
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DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 2 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
DATE	08.08.20	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC	
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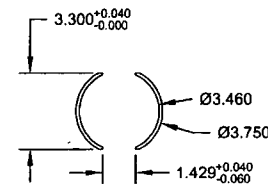
**D3391-1 CUTTING DETAIL**  
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



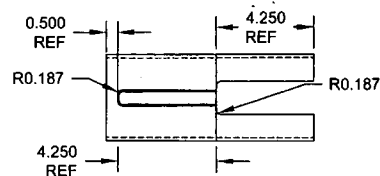
**SECTION A-A**  
SCALE 2X



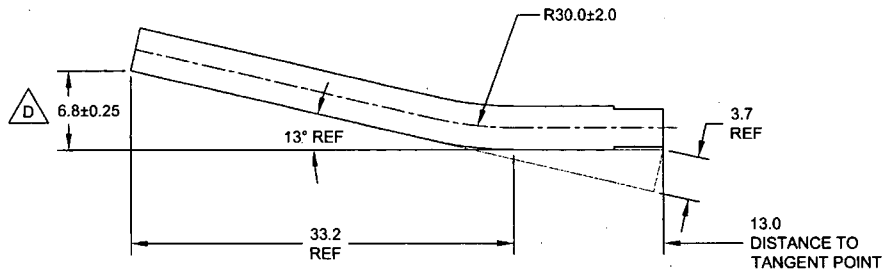
**SECTION B-B**  
SCALE 2X



**SECTION C-C**  
SCALE 2X



**VIEW Z-Z**  
SCALE 2X

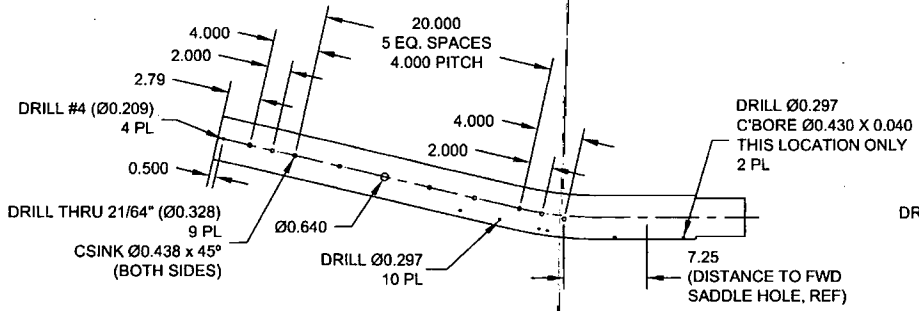


**D3391-011/-021 BENDING DETAIL**  
(MAKE FROM D3391-1)

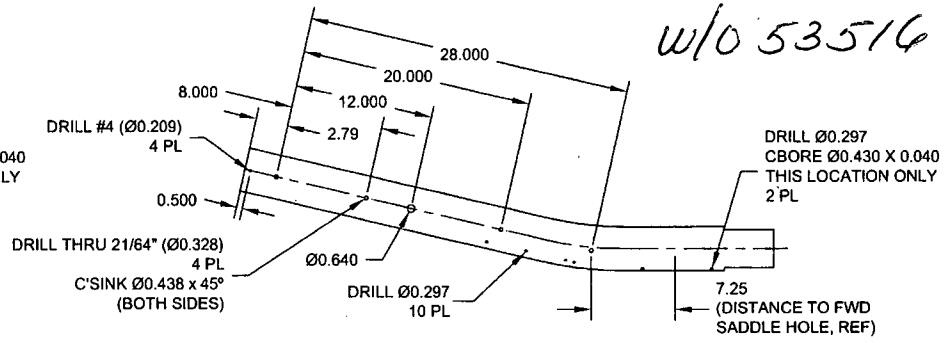
**RELEASED**  
28 JUL 2017

DESIGN	PH	<b>DART AEROSPACE USA, INC</b>	
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CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 3 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
DATE	08.08.20	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC	
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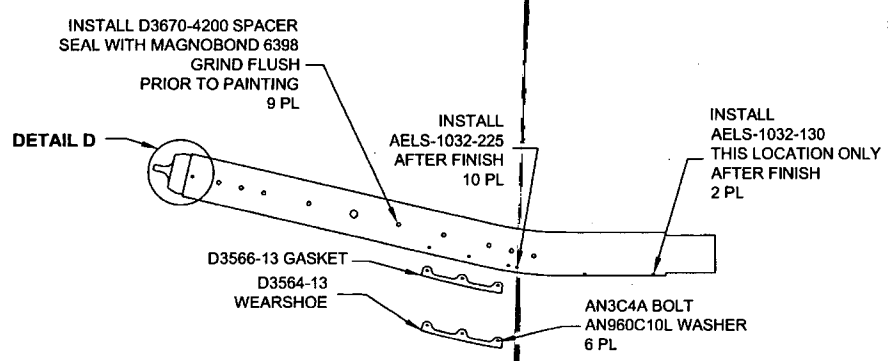
w/0 53516



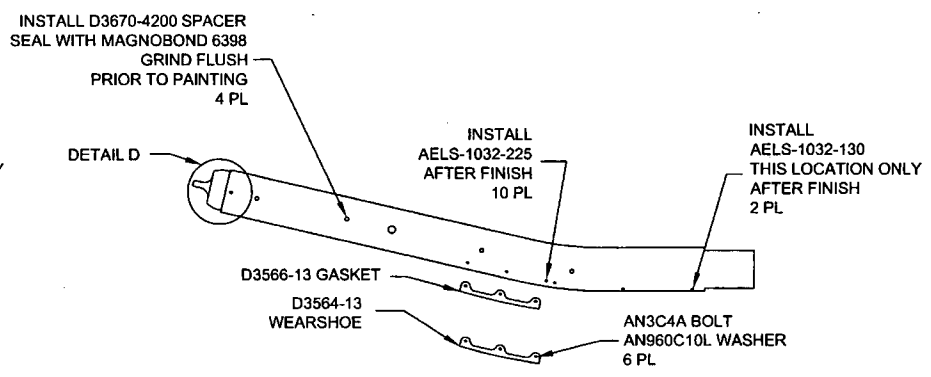
D3391-011 DRILLING DETAIL



D3391-021 DRILLING DETAIL



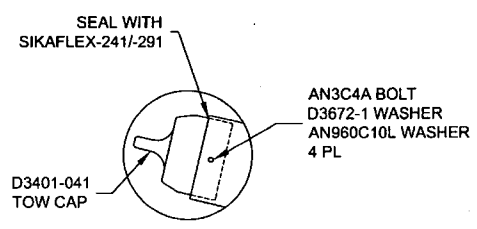
D3391-011 ASSEMBLY DETAIL



D3391-021 ASSEMBLY DETAIL

D3391-011/-021 FWD TUBE ASSEMBLY PARTS LIST

QTY - 011	QTY - 021	PART NUMBER	DESCRIPTION
X		D3391-011	FWD TUBE ASSEMBLY
	X	D3391-021	FWD TUBE ASSEMBLY
1	1	D6013-047	FWD TUBE
1	1	D3401-041	TOW CAP
1	1	D3564-13	WEARSHOE
1	1	D3566-13	GASKET
9	4	D3670-4200	SPACER
4	4	D3672-1	WASHER
10	10	AN3C4A	BOLT
10	10	AN960C10L	WASHER
2	2	AELS-1032-130	INSERT
10	10	AELS-1032-225	INSERT

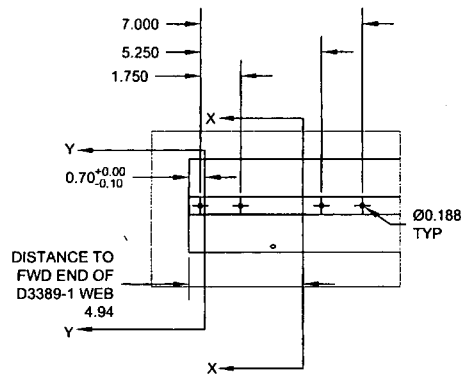


DETAIL D  
SCALE 2X

RELEASED  
08-09-05-14

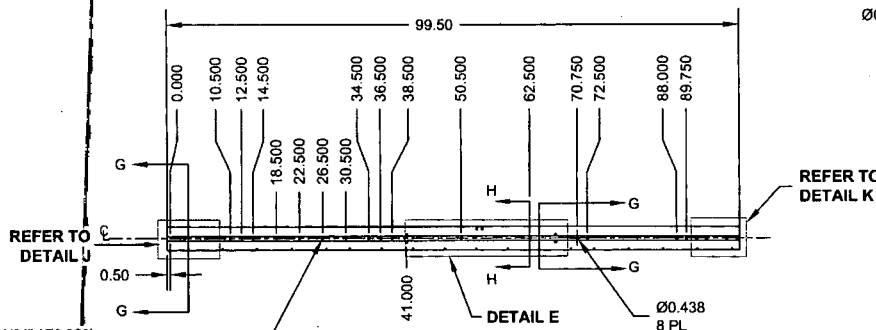
DESIGN		PH	DART AEROSPACE USA, INC	
DRAWN		AJS	PORT HADLOCK, WA	
CHECKED			DRAWING NO.	REV. H
MFG. APPR.			D3391	SHEET 4 OF 8
APPROVED			TITLE	SCALE
DE APPR.			412 FLOAT SKIDTUBE	NTS
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W/O 53516

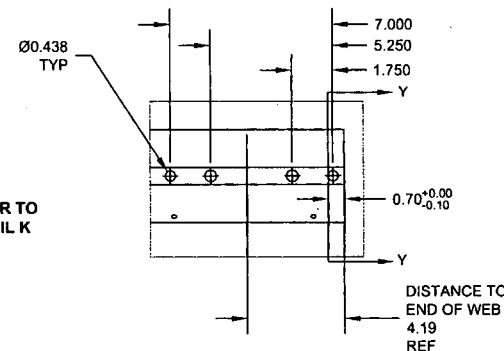


**DETAIL J**  
SCALE 4X

DRILL THRU 21/64" (Ø0.328)  
CSINK Ø0.438 X 45° (BOTH SIDES)  
12 PL



**D3391-013 ASSEMBLY DETAIL**

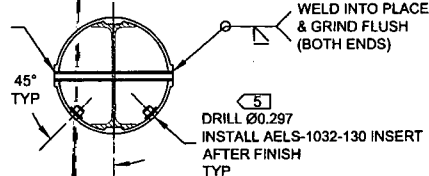


**DETAIL K**  
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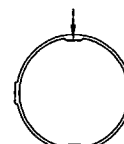
**SECTION G-G**  
SCALE 5X

INSTALL  
D3681-1 SPACER

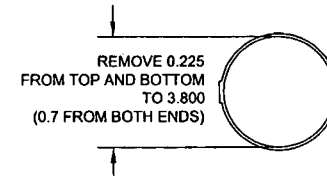


**SECTION H-H**  
SCALE 5X

REMOVE 0.030  
FROM TOP AND BOTTOM  
TO 3.610

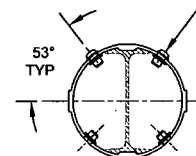


**SECTION X-X**  
SCALE 5X

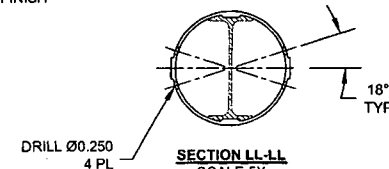


**SECTION Y-Y**  
SCALE 5X

DRILL Ø0.297  
INSTALL AELS-1032-130 INSERT  
MS27039C1-09 SCREW  
D3672-1 WASHER  
AN960C10L WASHER  
AFTER FINISH  
4 PL



**SECTION M-M**  
SCALE 5X



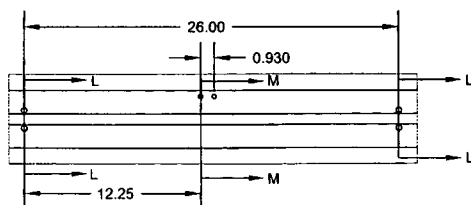
**SECTION LL-LL**  
SCALE 5X

**D3391-013 MID TUBE ASSEMBLY PARTS LIST**

QTY	PART NUMBER	DESCRIPTION
X	D3391-013	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
4	D3672-1	WASHER
4	D3672-3	WASHER
12	D3681-1	SPACER
24	AELS-1032-130	INSERT
4	ALS4-428-165	INSERT
4	AN960C10L	WASHER
4	AN960C416L	WASHER
4	MS27039C1-09	SCREW
4	MS27039C4-08	SCREW

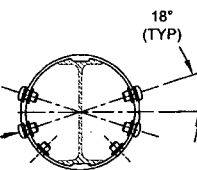
**D3391-013 MID TUBE ASSEMBLY**

- MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/-291 PER QSI 015
- WELDING: PER DART QSI 004



**DETAIL E**  
SCALE NONE

DRILL Ø0.391  
INSTALL ALS4-428-165 INSERT  
MS27039C4-08 SCREW  
D3672-3 WASHER  
AN960C416L WASHER  
AFTER FINISH  
4 PL



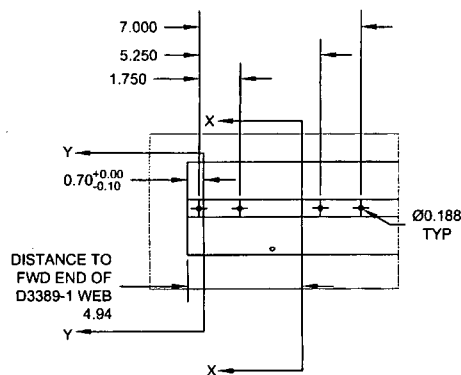
**SECTION L-L**  
SCALE 5X

**RELEASED**

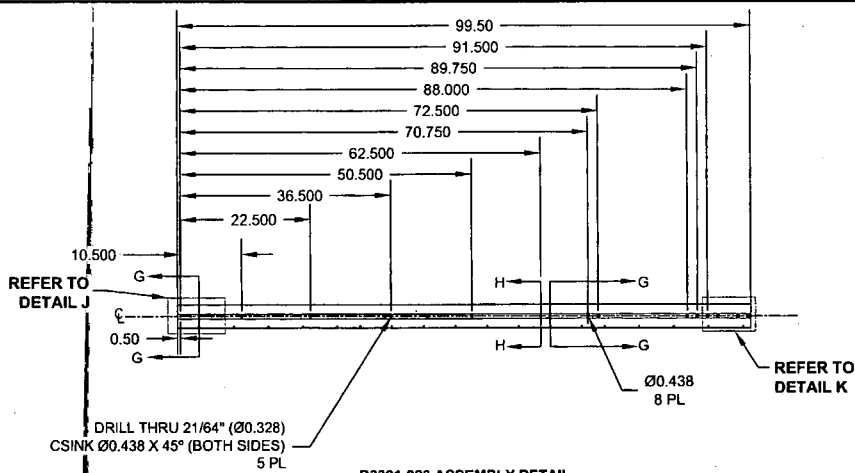
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DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 5 OF 8
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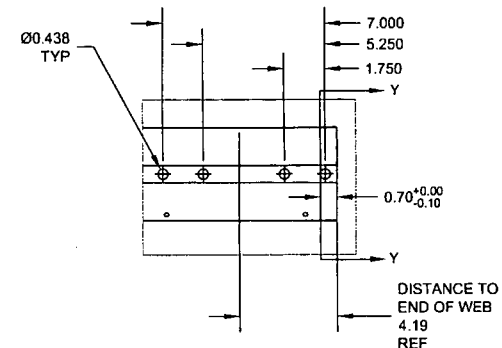
W/10 53514



**DETAIL J**  
SCALE 4X



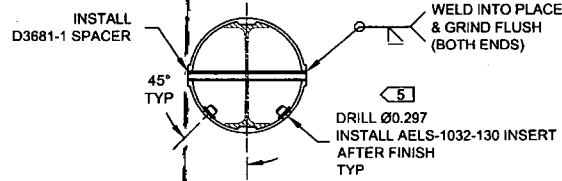
**D3391-023 ASSEMBLY DETAIL**



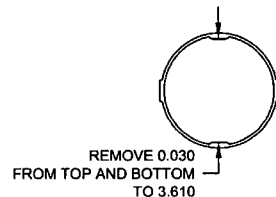
**DETAIL K**  
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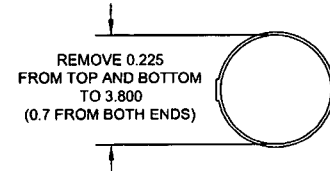
**SECTION G-G**  
SCALE 5X



**SECTION H-H**  
SCALE 5X



**SECTION X-X**  
SCALE 5X



**SECTION Y-Y**  
SCALE 5X

**D3391-023 MID TUBE ASSEMBLY PARTS LIST**

QTY -	PART NUMBER	DESCRIPTION
023		
X	D3391-023	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
5	D3681-1	SPACER
20	AELS-1032-130	INSERT

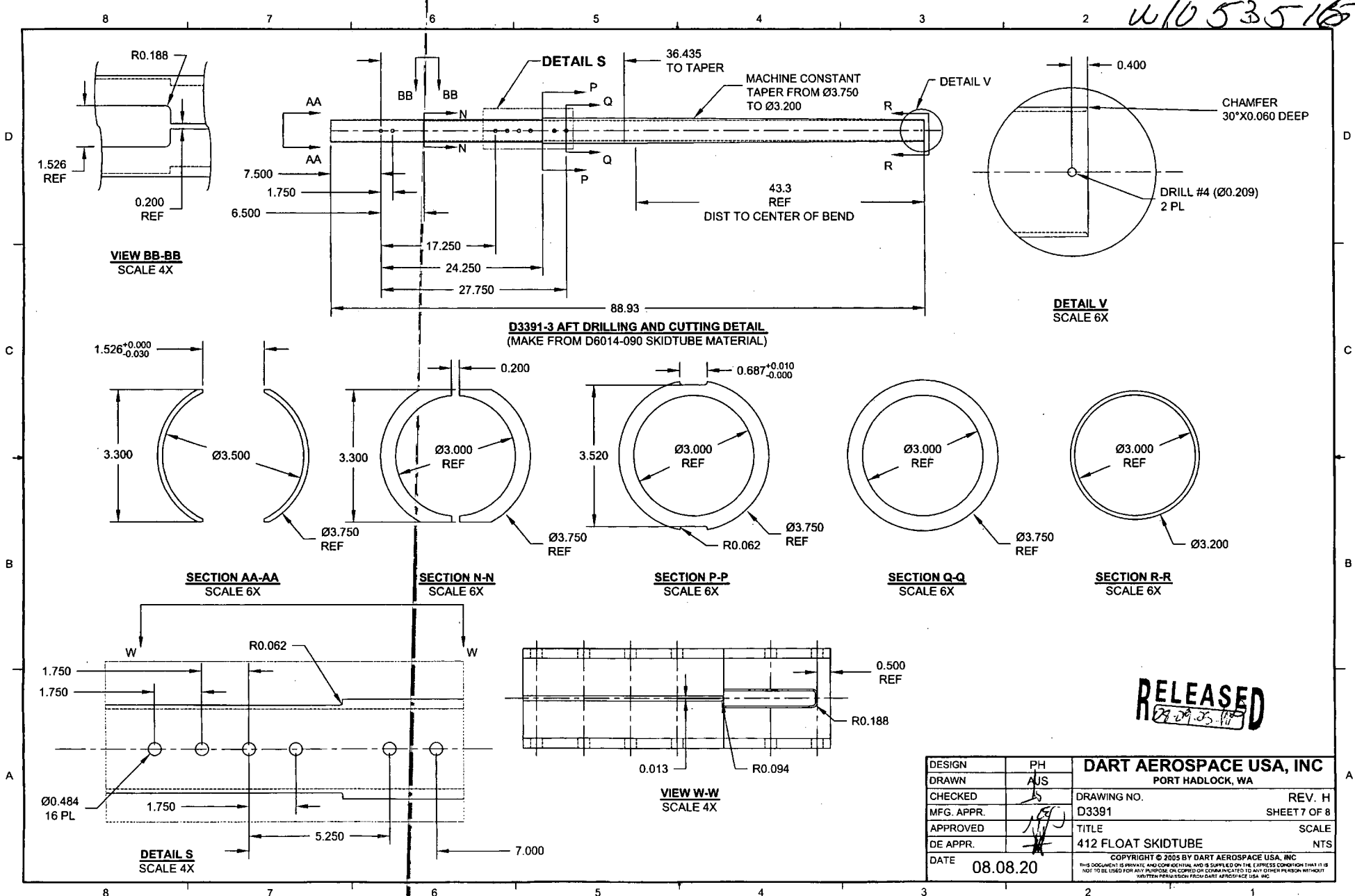
**D3391-023 MID TUBE ASSEMBLY**

- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/-291 PER QSI 015
- 3) WELDING: PER DART QSI 004




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08-24-05.14

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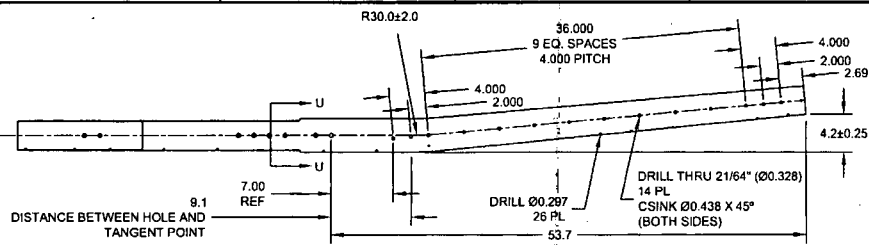
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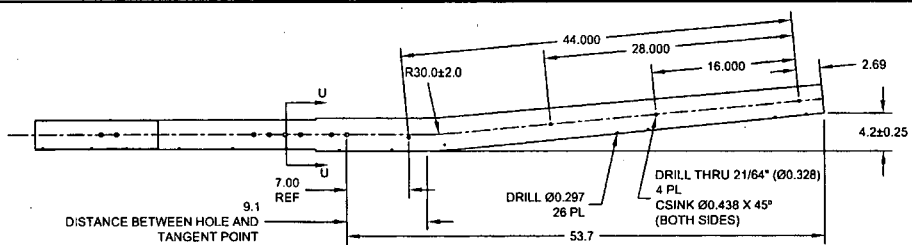
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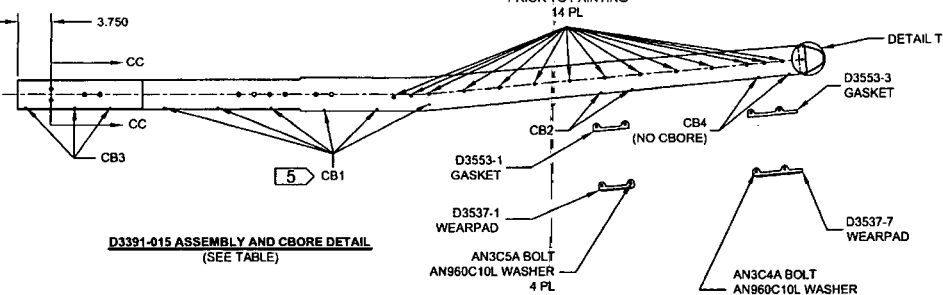
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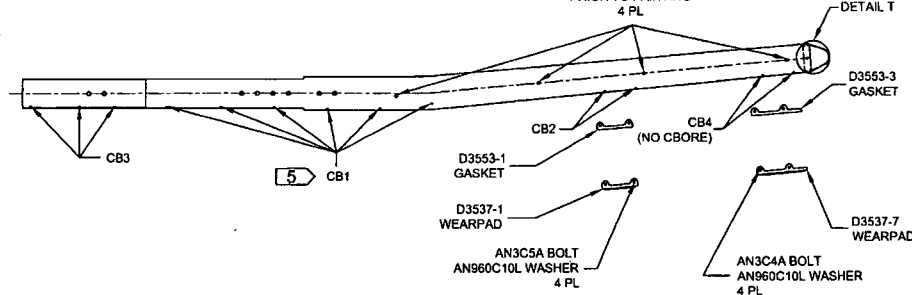
**D3391-015 BENDING AND DRILLING DETAIL**  
(SEE CBORE DETAIL BELOW)



**D3391-025 BENDING AND DRILLING DETAIL**  
(SEE CBORE DETAIL BELOW)



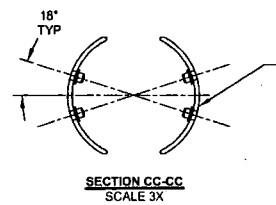
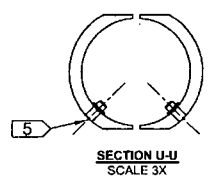
**D3391-015 ASSEMBLY AND CBORE DETAIL**  
(SEE TABLE)



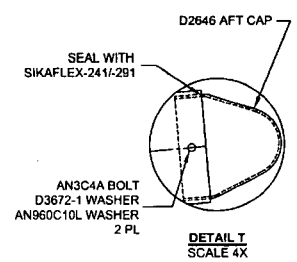
**D3391-025 ASSEMBLY AND CBORE DETAIL**  
(SEE TABLE)

**D3391-015-025 AFT TUBE ASSEMBLY PARTS LIST**

QTY - 015	QTY - 025	PART NUMBER	DESCRIPTION
X	X	D3391-015	AFT TUBE ASSEMBLY
		D3391-025	AFT TUBE ASSEMBLY
1	1	D6014-090	AFT TUBE
1	1	D2646	AFT CAP
1	1	D3537-1	WEARPAD
1	1	D3537-7	WEARPAD
1	1	D3553-1	GASKET
1	1	D3553-3	GASKET
14	4	D3670-4200	SPACER
2	2	D3672-1	WASHER
14	14	AELS-1032-130	INSERT
12	12	AELS-1032-225	INSERT
4	4	ALS4-428-165	INSERT
6	6	AN3C4A	BOLT
4	4	AN3C5A	BOLT
10	10	AN960C10L	WASHER



DRILL Ø.391  
CBORE Ø.516 X 0.040 DEEP  
INSTALL ALS4-428-165 INSERT  
4 PL



SEAL WITH  
SIKAFLEX-241/291  
AN3C4A BOLT  
D3672-1 WASHER  
AN960C10L WASHER  
2 PL

CBORE HOLES MARKED CB1-CB4 AS FOLLOWS AND  
INSTALL AELS-1032-XXX AFTER FINISH AS NOTED

HOLES MARKED	QTY D3391-015	QTY D3391-025	CBORE	P/N
CB1	12	12	Ø.430 X 0.170	AELS-1032-225
CB2	4	4	Ø.430 X 0.170	AELS-1032-130
CB3	6	6	Ø.430 X 0.040	AELS-1032-130
CB4	4	4	NONE	AELS-1032-130

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